

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
29 December 2004 (29.12.2004)

PCT

(10) International Publication Number
WO 2004/113863 A1

(51) International Patent Classification: G01M 3/28, F17D 5/02

(21) International Application Number:
PCT/DK2004/000414

(22) International Filing Date: 15 June 2004 (15.06.2004)

(25) Filing Language: Danish

(26) Publication Language: English

(30) Priority Data:
PA 2003 00927 20 June 2003 (20.06.2003) DK
PA 2003 01677 11 November 2003 (11.11.2003) DK

(71) Applicant (for all designated States except US): DAN-
TAET ELECTRONICS A/S (DK/DK); Højmevej 36-38,
DK-5250 Odense SV (DK).

(72) Inventor; and

(75) Inventor/Applicant (for US only): GARN/ES, Svend
Eskil (DK/DK); Klampenborgvej 3, DK-5700 Svendborg
(DK).

(74) Agent: LARSEN & BIRKEHOLM A/S; Banegårdsplad-
sen 1, P.O. Box 362, DK-1570 Copenhagen V (DK).

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KH,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MY, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.

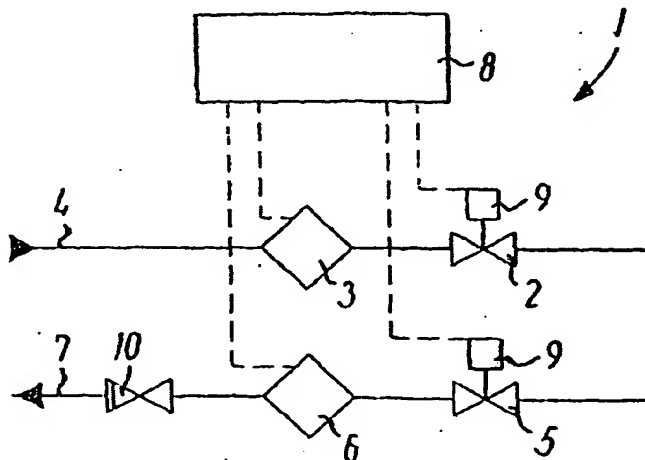
(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

(54) Title: A METHOD OF EXECUTING A LEAK CONTROL SYSTEM, AND A LEAK CONTROL SYSTEM FOR PERFORM-
ING THE METHOD



(57) Abstract: The invention relates to a leak control system (1) in two-stringed pipe installations and a method of executing a leak control system comprising one stop valve (2) with an associated flow meter (3) arranged in the supply pipe (4) of the pipe installation, and one stop valve (5) with an associated flow meter (6) arranged in the return pipe (7) of the pipe installation, said stop valves (2, 5) as well as associated flow meters (3, 6) being connected to a control box (8), said box (8) comprising one valve monitor (9) connected to each stop valve (2, 5) to control/record the possible state of the individual stop valve (2, 5): open or closed, as well as an executor which, in combination with the control logics of the control box and the operating conditions of the pipe installation, controls/monitors the valve monitors (9) during a given sequence of actions, said leak control system (1) being capable of performing

a number of measurements and data collections to evaluate the functionality of the stop valves (2, 5) and/or the elasticity and/or the tightness of the pipe installation. This provides the possibility of distinguishing between leakage proper and defects in the stop valves as well as the need for venting in the pipe installation and thereby a measurement area which begins at a low level, such that the comfort in e.g. a district heating system may be maintained.

BEST AVAILABLE COPY

WO 2004/113863 A1